

Ask Me Anything about Employment webinar with Susan McGurk

This call is being recorded.

David Blair: Good afternoon everyone, and welcome to Ask Me Anything about Employment with Susan McGurk. My Name is David Blair, and I'll be your moderator today. This webinar is not a presentation but an interactive question and answer period. And for the next hour, Susan will take any questions you have related to Enhancing Thinking Skills for the Workplace. Susan is a professor of Occupational Therapy and a member of the Center for Psychiatric Rehabilitation at Boston University. Along with colleagues, Susan has developed the Thinking Skills for Work program, which is a cognitive remediation program combining restorative task practice of cognitive skills and the teaching of self-managing strategies designed to optimize cognitive and work functioning in persons receiving vocational rehabilitation services. The results of a recently completed NIMH-funded, two site randomized-controlled trial indicate the ability of the program to improve work outcomes in people who have failed to respond to supported employment. This is the first trial to date that has demonstrated the ability of cognitive enhancement program to improve rehabilitation outcomes in people who have failed to respond to an evidence-based practice.

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Susan, thank you for taking your time and, for being with us today. I want to just begin by people, kind of an overview question of what, and we'll kind of go through a couple here just to bring everyone up to speed. What is cognitive remediation?

Susan McGurk: Well, that's a good start. Thanks, David, for setting, arranging the call, and for your introduction. So yeah, cognitive remediation involves a set of strategies to help people both improve their thinking skills and compensate for cognitive difficulties by using self-management strategies. So to improve cognitive skills, typically we use computer-based cognitive software, and there are a number of

software packages that have been published and found to be effective to improve cognitive functioning for people with serious mental illnesses and other conditions. And people practice these exercises ideally with a trained facilitator to help them get the most out of the practice. And then some programs, such as ours, compliment that cognitive practice with individualized self-management strategies to help people optimize their community functioning and functioning in the workplace; such as using checklists to prioritize what needs to be done first on a job or using a memory spot to keep items of daily living in one particular place in one's home or at work, so we know where to find them when we need them. And so, these strategies practicing, cognition to execution....

David: Hold on a second, Susan, we've got feedback there. I'm going to mute people. Second. I just need to mute people. Okay. Mute all. Al right, there we go. Susan, can you say something now?

Susan: Yeah.

David: Okay, good. I'm all muted. You're all set. Go ahead.

Susan: Yeah. So, cognitive remediation is also sometimes called cognitive rehabilitation or cognitive enhancement or cognitive training. These are all descriptors of the same approaches, which are primarily, as I said, to both improve cognition or thinking skills, and help people use strategies to optimize their functioning in daily life. And the latter, we all use, for example, calendars or schedulers either by phone or a book to keep track of our appointments so we don't forget them. We use the alarm to remind us to do things, we might leave ourselves phone messages. Everyone uses some type of cognitive self-management strategies. So, to help them remember everything they want to do on a particular day.

David: Okay. And then could you also just give an overview of the Thinking Skills for Work program?

Susan: Oh, certainly. Yeah. So we, in some of our prospective research and other researchers' projects as well, what has become clear is that cognitive functioning or thinking skills, which include paying attention and concentrating, learning information and remembering it, planning ahead, problem, solving, etc., are all important skills for community functioning and for work. And are also skills that, some people who have psychiatric illness have difficulties with. And all these skills, as I said, are important for work. And prospective studies have shown how important they are by indicating that people who have greater challenges in their thinking skills often have difficulty both getting and keeping work. So because of these, because of these data, we developed a cognitive program to

both help people improve their cognition and manage it, manage cognitive challenges, and to take control over these skills so that they're working for the person.

Susan: And so the Thinking Skills for Work involves, and I'll just give a brief overview, an assessment of people's cognitive strengths and weaknesses per self-report by talking to their employment specialist, etc., and finding out which cognitive areas are strengths for the person and which areas may have been obstacles in prior work. So for example, some people have trouble paying attention or paying attention for long periods that are necessary for certain job tasks and that inattention might have cost them a job. So we take stock of the person's range of their cognitive skills and cognitive functioning, and then we figure out through a job-loss analysis, which cognitive areas have really been a particular issue for this person. Then we have a standardized 24 lesson plan, computerized cognitive practice that is based on content exercises. We use a select group of those exercises and we organize those exercises in a meaningful manner in this curriculum. So each time the person is working on a lesson plan, they're practicing broad-range cognitive skills, like attention learning, problem solving, each time they're in the lab and working with the cognitive specialist. So the cognitive specialist is the person who is facilitating Thinking Skills for Work, and they do the assessment with the client. And then they work with the person in the computerized cognitive practice. And the goal of the practice is for the person to help improve their cognition. And even areas where a person has strengths can be improved through practice. That cognitive specialist is providing strategy coaching to the person while they're doing the exercises. And strategy coaching involves teaching the person more effective approaches to the cognitive exercises. So for example, we often see that people don't, are giving information that they need to study and learn that is, then there's a pop quiz on it after delay. And not everyone takes full advantage of the time they have to learn that information. So they're not really putting in effort, full attention. They may think they are, but they often don't. And as a result, they don't remember the information. So strategy coaching would involve helping the person pay more close attention to the information and apply learning strategies, like chunking it or organizing it in a meaningful manner to increase its chances of being there when it's time to recall it. And all of this practice takes effort. And so the cognitive specialist, enhances the person's motivation to try hard by linking the exercises to work or work tasks that the client is likely to encounter in the job that they're looking for. So, Thinking Skills for Work is integrated with vocational services, optimally supported employment, and the cognitive specialist collaborates with the client's employment specialist, in order to help the client search in an efficient manner in their job search and perform the job in

a way that will enable them to keep it. So the employment specialist is very important to this process. The other component, in addition to the computerized cognitive practice, is the individualized self-management strategies. So these involve figuring out which strategies would help the person improve their functioning in meeting with the employment specialists, looking for a job, and performing the job once they get one. So these involve, as I said, making To Do lists or developing a routine or prioritizing work tasks, etc., or keeping a schedule so they don't miss appointments with their employment specialists, which prevents them from receiving the full benefits of the services.

Susan: Let's see. The other issues that come up that are addressed in the self-management component involved negative self-thinking. So sometimes when the cognitive specialist is working with the client and the exercises, clients will disclose thoughts, such as *"Nobody will ever hire me, or I can't do this, I'm not smart enough to do these tasks."* Or some, you know, they may disclose some disparaging thought about themselves. And this is important because if people are not optimistic about their ability to be a worker, then they may not try as hard in the job search. Or if they're not, hopeful in their ability to benefit from the cognitive practice, they may not try as hard in the cognitive practice. So the cognitive specialist points out that the person is having these kinds of thoughts and teaches them skills to challenge them. And it's a little bit like cognitive behavioral therapy, but it's specifically based on these kinds of thinking that the kind is revealing in their work with the cognitive specialist.

So other self-management strategies address problems with attention, with thinking speed, work demands, responses, inadequate periods of time, such as answering a customer's question or making a decision; and exercises practice those areas. But sometimes people still need to manage difficulties in them. And so, we teach self-management strategies for thinking speed.

And we also, if someone doesn't have a routine at home for getting ready for work in the morning or a nighttime routine, the cognitive specialist helps the clients adopt one. Because having a routine helps people perform tasks more efficiently because they do them in the same order and become automatic, and that reduces the time it takes to complete them.

So those are some of the examples of strategies. So far I've described assessment, which involve determining someone's cognitive strengths and weaknesses. Job loss analysis to figure out what areas of cognition had been stumbling blocks for the person in their work pursuits. Then the person receives 24, completes 24 lesson plans of a standardized manualized cognitive curriculum, that is facilitated by the cognitive specialist, and who helps the

person get the most out of them through strategy coaching and motivational enhancements to their practice. And then individualized self-management strategies are taught to the person, to help optimize, as I said, their functioning in the community. And the latter, in particular, is the employment specialist is engaged around those because they can help suggest what self-management strategies might be helpful for the person and also prompt the client to use that strategy in the community.

David: Thank you. So I know we just talked a whole lot about what the program is, so people get context for the work that you do, but I realized I don't know where to point people to find out more about the program. Where would people, who would they, where would they look? Who would they talk to?

Susan: Well, at the Center for Psychiatric Rehabilitation website, I have, we have a couple of links there on my, on the page describing my research are linked to a very basic description of Thinking Skills for Work. And there's a list of references of some of the studies that we've done. It's available throughout, not throughout the United States, but in certain mental health agencies in certain states it is available. Right now we're in the middle of a NIDLLR-funded study to develop a scaled-up version of Thinking Skills for Work or vocational specialist to learn how to do it, so they can implement it in their vocational program. So we're moving towards making Thinking Skills for Work much more widely available for people.

Susan: And I also want to say one other thing about who might, who might benefit from it because that's often a question from a mental health treatment teams and vocational specialists, "*Who might profit the most from it?*" And although many people who have serious psychiatric illnesses have difficulties with thinking skills, not everyone needs a formal cognitive program. And the reason I say that is, there are, it's a time commitment and not everyone needs it. Even though they may have cognitive problems, they may already have effective management, self-management of those problems. We think people who may benefit from it are people who have received good vocational services, such as supported employment, but haven't benefited from those. And cognitive problems are often the culprit because they can prevent people from receiving the full benefits of this evidence-based practice. And so these are people who may have had a job but got fired, or quit and walked off the job without job plans, or who have had consistent trouble in getting work in supported employment, despite receipt of these services. So these are people who may get more out of supported employment by receiving a cognitive program, like Thinking Skills for Work.

David: Okay. And for anyone who's in the room, I put the links to both Susan's profile (<https://cpr.bu.edu/about/directory/susan-mcgurk>) and a cognitive remediation newsletter (<https://cpr.bu.edu/resources/newsletter/cog-rem-text-only/>) that she mentioned a bit earlier.

So Evan actually asks, “Has there been any study comparing 1) the use of software plus individualized self-management strategies, 2) in context individualized self-managing strategies alone without the software piece? So I can do that again. So any study comparing the use of software plus individualized self-management strategies, 2) in context, individualized self-managed strategies alone. So without the software piece.

Susan: Yeah. Well, that's a great question. We're actually just, we actually just finished an NIMH-funded trial of exactly that. So the reason why that's a really interesting question is because the cognitive practice takes a commitment, takes a time commitment. So I said we have a 24-lesson plan curriculum. And for some people that may take 30 hours to complete depending on their cognitive challenges. Greater cognitive challenges may take them longer, but of course, the profits would be or could be bigger. But, it's resource intensive, it requires time, the cognitive specialist time, the client's time. And, we don't want people to do that if they don't need it to get where they want to go. So self-management strategies, as I said, are strategies we all use every day. And for some reason, some of our clients don't use them at all or to their advantage. And for some clients, these may, using these strategies in a thoughtful way, meaning ones that they will use and benefit from, may be all they need to really get the most out of vocational services or get a job and keep it, without services. So, we had some indication that some people may just need self-management strategies from our last study, which we published in 2015, and in some secondary analyses we showed that some people, in particular with mood disorders, not need the cognitive training or not everyone may need the cognitive exercise practice, but may just need some help in developing a routine or some suggestions for working around memory difficulties or compensating for those or some help in solving unexpected problems on the job, which can be a problem for some people. And so because of those kinds of intriguing secondary findings, we completed a study randomizing people to receive the full Thinking Skills for Work, which involves the cognitive practice and the self-management strategies compared to self-management strategies alone. So, you know, plus all the other elements of thinking skills, such as assessment and engaging the employment specialist, etc. So this allows us a chance to evaluate if or who the computer practice is important for and who may just need the self-management strategies. We haven't fully analyze these data yet, so we don't know the

answer, but our hypothesis was that people who have greater cognitive challenges, and often that involves people with schizophrenia, they may need everything, all the aspects of thinking skills. But people who are, who don't have as great a burden of cognitive difficulties may just need some help with managing cognitive challenges. And so we should know, we should have the findings, in a couple months and can address this issue. And it helps lead to more personalized medicine in that, we can determine who needs, who needs what.

David: Well, thank you. So a couple of things. Diane wrote in the room that says, "Hello, Susan, this is Diane. I worked alongside you at the trial project with the Clubhouse at Suffolk." So just acknowledging that Diane is saying, we're with you today.

Susan: Hi Diane! We published that study in, I guess it was 2010 maybe. Yeah, we had very successful implementation on Thinking Skills for Work in a clubhouse that was delivering supported employment services and very good services. And that's in Suffolk County in Long Island.

David: The second one is a question from Susan and Susan submitted this in advance, she asks, "How can cognitive remediation help with focus and executive functioning deficits?"

Susan: Help with focus, you said?

David: Focus and executive functioning deficits.

Susan: Okay. So, you know, it's interesting. That's an interesting question. So cognitive remediation, and in particular the computer exercise practice, this was first really applied in people with traumatic brain injury. And the one area where it's a consistent recommendation for people with TBI is for attentional difficulties. And some people have a lot of problems in paying attention and paying sustained attention. And computer practice can really help with that because it helps force, it forces practiced attention over an hour session. So people are building up their cognitive stamina by doing these exercises. So they're getting, a specific boost to their cognition based on what the exercise is addressing, it might be learning or problem solving or attention. But globally, they are needing to focus for that full hour or hour and a half or however long the session is. And that's really working at concentration muscle and has a great implications for the ability to work a job that requires intense concentration and to go to school and be successful at it; that requires high levels of concentration. So there are specific exercises that practice attention, but all exercises require attention. There, we use Cogpack (<http://cogpack.com>). It's a commercially available software program that's

available on the Internet, it's relatively expensive. We're not involved in the sale of it; we are consumer of it. It provides a broad-based practice, and the exercises are really good, and there's a few in the Cogpack suite that practice sustained attention. So these exercises can be up to five minutes long and require a continual response. And so the cognitive specialist can monitor if the person is on task, meaning paying attention, based on the responses they're required to admit, in doing that exercise. And it's very, it can be very tiring for some people, because it's a cognitive skill that they may not have used in a while, but is very important for community activities. So that's a long description of how you can help improve people's attention. There's no way around improving it other than using it. And that is one bonus of the cognitive exercise curriculum.

Susan: The other question is about how do you help improve people's executive functioning? And executive functioning is a term that applies to broad-based skills, such as conceptual reasoning, abstract thinking, planning ahead and solving problems, and recognizing that there's a problem. Some people have difficulty with that and can really benefit from some concrete help from say the employment specialist to recognize there's a problem, such as if you're working as a cashier and your line is longer than everybody else's or if the customer is angry. Some people need prompts to understand when there's a problem and that requires a solution. So how do you help people improve that? Well, and the cognitive exercises include a practice of actual reasoning, planning ahead. There's a maze task that requires looking ahead to avoid blind alleys in getting to the solution of the maze, and that practices planning. There are specific kinds of problems or puzzles that people do on the curriculum and strategy coaching from the cognitive specialist involved helping people develop a plan and carrying out the plan and concrete steps, and usually involves paper and pencil to generate solution. So, that's computer practice.

Then in self-management strategies people can compensate for problem recognition by, as I said, having the employment specialist help them understand what would be a problem on that job that they're either starting or a job that they have or job they want, what would be a problem? And then, work through solutions for those problems with the client ahead of time so that they have a plan or problem recognition and a solution so that, when that problem arises, they know what to do. So for example, one gentleman wasn't sure how to do, you know, if he was afraid of his supervisor who he thought was rather gruff. And so they had a plan that when a coworker was on his shift that he could ask that coworker how to solve a particular problem. That would be his kind of go to problem solver. And if that coworker wasn't there, then he could, the clients would call the employment specialist to work through a solution rather than

trying to solve a problem that they don't know the solution on that may get them into trouble. So that would be an example of planning ahead. You know, planning ahead for a particular problem and then having a solution in place.

David: Sure. Can I, I'd like to tie up a couple loose ends with this question before we move onto the next. So Evan wanted to clarify a couple of things. First, you, can you give the names of the assessments that you used before? You mentioned the software Cogpack?

Susan: Yeah. So Cogpack is cognitive software, and it provides exercises that practice broad thinking skills, attentions, sustained attention, learning memory, verbal learning, spatial learning, problem solving, planning. So that's a platform to help practice cognitive skills. And then these are formal assessments of cognition. So this is an interesting question because many people who are, if there are vocational specialists on the call, etc., they don't have access to somebody who can conduct a formal neuropsychological assessment for the client. Sometimes clients have them in their medical records and they can be accessed there. Maybe, the person who performed it, a psychologist, can go through it with them. But by and large, these kinds of assessments are not typically available in usual services or in our vocational services. So it's a great tool if it's available to do a cognitive assessment; and there are several that are currently available and have good psychometrics for people with a psychiatric illness, such as the Brief Assessment of Cognition, developed by Keith and colleagues. The Matrix Battery, that's kind of the gold standard for assessing cognition in people with schizophrenia and other severe mental illnesses. That's, lots of uptaking clinical trials using the Matrix Battery. It's rather lengthy, it's about 90 minutes. The BACs is about 30 minutes. If these assessments are available to people, they're great to use because it can help inform people's, any frank impairments, meaning areas that are impaired. And it's always good to know, as well and as well as relative strengths and weaknesses. So you may have a variety of impairments, but you can also know which areas are strong for the person and capitalize on those.

We, in Thinking Skills, we have Thinking Skills for Work assessments that doesn't involve formal assessments because we know that they're typically not available. So we have a self-report interview, where we ask the person about each area of cognition, attention, memory, problem solving, and ask how their skills are in each of those areas. We ask about any self-management strategies they're already using, and how they're working the person. So we know what we can add on or help improve. And, we also do, as I said, a job-loss analysis for the person's most recent job to understand in great detail what went wrong on the

job, and in the case of the client was fired. And in particular focusing on whatever cognitive contributions may have had a hand in that job loss. So, if the person was consistently late and that cost them their job. Well, we'd look at why they were late. Was it because they overslept or didn't know the bus schedule or missed the bus or some other reason that could, is preventable, and with a routine or some planning ahead, can help avoid that problem in the future. And cognition or cognitive problems is not responsible for everything that goes wrong, but it often has a hand in some problems on the job. And when addressed, can help the person be more successful, I'm not sure I, David, did I answered the question?

David: Okay. Yeah, he, it looks like Evan is happy with you. Okay. So, I'll go to the one last point, if you could just do it briefly, so I can move onto the other questions. It was a follow up. **Do you have plans on when you'll submit the follow-up study, you mentioned for publication?**

Susan: Oh, you mean that comparing the full Thinking Skills for Work with the self-management component?

David: Yeah. I think you said something like in the next couple months you were wrapping something, it up.

Susan: Oh yeah. We, I'm hopeful that we will have it out in early fall.

David: Okay. **Do you know what journals you'll submit it to?** He's clarifying what journal.

Susan: No, we don't know that yet. We often decide that once we have the paper written.

David: Okay. So moving on to the next question. So we have questions from an individual submitted in advance. **"Is someone who has lived with schizophrenia disorder since childhood, they're now 47. They most recently worked as a nurse practitioner and a hospital administrator. They ask, I worked in a healthcare setting for 25 years, but resigned five years ago and have worked very little sense. I struggle with gradually worsening word-finding difficulty working memory deficits and impaired processing speeds. I have access to Lumosity and brain HQ, but find it difficult to motivate myself to play a 'brain games' without professional guidance. What else can I do to address my cognitive challenges as I begin to assess my ability to return to work?"**

Susan: Yeah, that's a complicated question. And I'm sorry to hear that they're not working in their field right now. I might recommend that. How old is the person?

David: 47.

Susan: Young. But if they're really aware that they're or feel like they're having some declines in information processing and word finding. And what was the other area?

David: Give me one second. So word finding, working memory deficits, and impaired processing speed.

Susan: If I could suggest that the person contact their mental health provider and ask to be referred for neural psychological assessment, I think that would be very helpful, especially if they held the job for sounds like most of their adult life. And, a very, you know, professional job that required a significant education and only recently has lost it and is noticing some cognitive issues. I would have an assessment. I would have them checked and if they can connect with the neuro psychologist, I think that would be very helpful in understanding that if there are cognitive changes and what might be contributing to them. And it could be any number of issues that I can't, I don't have enough information to even guess, but I would recommend that.

And in terms of doing the at-home cognitive training with various commercially available software, many people report, you see this is the issue, many people report that they're not, you know, they don't stick with it or they're not interested. And that's why we have a trained facilitator because these kind of self-administered cognitive exercises can be problematic in that people may be approaching exercises in an inefficient or ineffective way and practicing and in an effective strategy over and over, and unfortunately getting really good at doing something badly because they don't have a trained person there to help recommend a better way to do the task, and to give them encouragement and motivation, and to help stoke their effort. So that's kind of a drawback of self-administration of cognitive practice. And in, there are a variety of studies that have pretty much showed that this kind of practice for people with schizophrenia anyway. And I realize that's not necessarily addressing the person who's asking this question, but it's not effective. And so that's why cognitive remediation for people with schizophrenia, for example, and other psychiatric illnesses that often have a cognitive cost, that computerized practice alone is not considered cognitive remediation. It's typically combined with a trained professional. So then the issue becomes where might they access that in their community? And that's the issue. That's why I think these commercially-available programs are so popular is because cognitive remediation, effective cognitive remediation is not widely available yet. That's why scaling up is really imperative for a scaling up of effective programs. But if they could contact their, a local

mental health agency, or maybe they're connected with one, and ask them. And in fact if they do follow up to get a referral to a neuropsychologist, they can ask that person if there is a professional or professionals in the area that can provide this service, and it could be covered by their insurance.

David: Yeah. So the person sent me a little private message now to clarify a couple of things. They have had the assessment done, but they can't find an affordable program for them. They've been connected, you know, to a neuropsychologist, it seems like as these can't afford it, and they're based out in New York City.

Susan: Well, if you could ask them to email me, I might be able to give them some recommendations.

David: Okay. All right. I will, I'll pass them your email directly.

Susan: Yeah, I can give it to everybody. It's mcgurk@bu.edu.

David: All right. Saved me some typing. Thank you.

Susan: Yeah. I also want to say that Thinking Skills for Work was developed by myself and Kim Mueser, and we've tested this in multiple randomized-controlled trials in a variety of vocational models. And the most effective model, of course, is supported employment. So competitive work is much greater in those studies that used a high fidelity supported employment. Another point to be made is for, and I realize there's a variety of folks on the call and please ask questions so I'm providing information that's relevant. But what we found is even in across the studies that we've done, we get a pretty good cognitive effect size across our studies. But, thus far we published primarily work studies. So work being our primary outcome. But our competitive work outcomes are greatest and better vocational models, like supported employment. So this really suggests that tinkering with cognitive effect sizes may not be as important as having high fidelity psychosocial rehabilitation services. Because across these studies, similar, you know, we all would get cognitive effects in our studies, but our primary outcome is work. So having say two different studies that have the same cognitive effects size, the same cognitive intervention, one study has much better work outcomes in the context of supported employment compared to one that has a traditional or broker vocational service services that does not have a great track record. It kind of shows that a little bit of sharpening and honing of cognitive skills combined with evidence-based psychosocial rehabilitation is the most effective way to impact functioning. And I actually, no one has really asked this question, but it's really important and that is that improving cognition alone, meaning in a standalone program, just, you know,

maybe at home in a self-administered program or in a clinic, and even though the person may have a particular goal, that cognition could be improved depending on how they're practicing it, but it's unlikely to transfer to the community. In fact, the data are pretty strong that it does not transfer to community functioning. So, that cognitive effort and that cognitive practice is squandered because the person is also not receiving psychosocial rehabilitation for the goal or goals that they have. The combination of cognitive practice and effective rehabilitation, say Social Skills Training or Supported Employment or Illness Management Recovery, that helps the person get more out of the rehabilitation. And it, the way we understand that is that the cognitive practice helps people sharpen up their attentional skills and their learning. And having those sharpened-up skills in the context of a rehabilitation program that needs them, that uses those cognitive skills, helps the person get more out of that program. Some people may be still doing the cognitive practice on their own, but so far studies are not very promising in the ability of those cognitive effects that transfer on their own. So, yeah, it's any kind of combined program would be a much better investment of someone's time.

David: Okay. The next question we have is from Regina. She says, "Hello, Susan. As a fellow occupational therapist, we are, concerned with supporting people with daily function. As a result of your work, what can you say is our key learning in the area as a result of your work? Thanks for all you do."

Susan: Yeah, let's thank you. Occupational therapists are where it's at. And, you know, we aren't really lucky enough to encounter them in typical outpatient mental health services, but these are people who really get what we're doing. As you know, they understand how cognition affects functioning. So it's a really good question. Like what is the take home of this? You know, I would say that it depends on who the client is. So if it's somebody who is pretty well burdened with cognitive impairments, I would give a combination treatment, if at all possible, where you're in commonly practicing their cognitive skills and figuring out what self-management strategies, and you can limit it to one or two. We really helped this person function better and provide them both at the same time, along with any other programming that's available to that client. And that, you know, that combination is really effective for functional impact.

Susan: The other, and for people who are not as heavily burdened with cognitive problems but still have some difficulty getting where they want to go in their daily lives, self-management strategies alone can really help the person organize their day, prioritize their tasks, remember their appointments. So if that's all that that's available, those are, those can be very effective. And, if I can put in a plug

for our book, where *Cognitive Enhancement for Work* is in press in Guilford Press, and it should be out, I'm hoping in a few months. We describe in great detail our cognitive self-management curricula, which we are testing on it and in a variety of trials. And, in fact, an occupational therapist in Oregon has modified our materials for Thinking Skills for Living curriculum and is administering it to people in residential care to help them improve their independent living skills in order to improve, increase their independent living context. In other words, to move out of these residences and live independently or in a more independent situation. And that combination has been very effective where the OT is doing Thinking Skills for Living, the self-management strategies and cognitive practice, along with the other skills training in the residence, and it's really helped people move out of these residences, these locked residences.

David: Okay. And know I just went and looked for your book and it's not on Guilford Press' website yet. So

Susan: I mean it's not quite there yet, but we're hoping in a few months.

David: Okay. And I, it looks like if you go to their website, you can sign up for e-alerts, so you'll get announcements of the new things they put out. So I will, I'll put that link in the room for people, so that announcement can get out (<https://www.guilford.com/e-alerts>).

So Tamar writes, "Susan, for those of us now working with adolescents and young adults at risk of serious mental illness, any suggestions for how to begin addressing cognitive search strategies in a preventative way?"

Susan: Yeah, so there's data from the NAVIGATE trial, sorry, from the RAISE trial. They may have, they may be familiar with the RAISE intervention that involves NAVIGATE, which is a psychosocial treatment program, and RAISE was developed for people in having an early course of schizophrenia. And what was interesting in the cognitive findings, which are not published yet, but have been presented at a conference by Nina Schooler, showed that people who receive NAVIGATE, and these were younger folks, had improved cognitive functioning from baseline. So, and there are a few other studies that show that psychosocial rehabilitation, a good comprehensive program like NAVIGATE for example, can help people improve their cognitive functioning. Now how can that be? Well, this is just conjecture, but some people early in their illness or who are becoming ill, may become depressed or at higher risk for substance abuse may become isolated, often have failures in their community role functioning like being a student or worker. And younger people are more likely to be a student, they may drop out or flunk out of school and isolate. So they're developing a cognitively sedentary

lifestyle, and that could contribute to some of the cognitive issues that we see in people who have longer term illness. So engaging them in this NAVIGATE program and stimulating their interest in going back to school, in staying in school, and going to school and getting a job; that combination is a common goal for these younger folks may help prevent some of the cognitive problem that are part and parcel of some of these illnesses. Or even better, help stimulate cognitive activity and improve cognitive functioning. So I wouldn't say the first thing to do is to jump into a cognitive program because the evidence from the first episode thus far is scarce. The more compelling data indicate engagement in community programs that, something like NAVIGATE, helps people acquire. It's you know, keeping them having a grasp on their community goals and engaging them in community activities.

David: Okay. I think this is the last question we have. So, Adam is asking, "I'd be particularly interested in any peer-to-peer methodologies or programming and I'm going to put it in the context of cognitive remediation. So, how computers be involved in this process?"

Susan: So I don't know of many studies that have looked at peer-run cognitive programs. Clearly this is, peers are resources that can and should be accessed for these interventions. And I know in talking to folks at the Center, students who come to the Center for Psych Rehab, I'm just really impressed at people's range of skills in using self-management strategies. And people have, you know, can teach each other what is working for them. I know in some of our programs that have been implemented in mental health agencies, oftentimes the cognitive specialist will either employ a peer or on a volunteer basis, a peer will come and help run a lab. And this, you know, this is a great resource for the program because they'll help the cognitive specialist and that, of course, increases the available resources running it. I should mention that, although Thinking Skills for Work is it can be done individually, but also in small groups, so you can have a couple people working through their curriculum individually at their computer station at the same time in a room with the cognitive specialist, sort of, providing strategy coaching to each person as needed. And it increases that potential to engage more people in the intervention. And then having a peer, who has graduated from the program already and knows it, assist the cognitive specialist, is a way to engage, allow more enrollment in the program.

David: Great. Well, I'd like to...Go ahead.

Susan: To find information about peer-involved or peer-delivered cognitive programs, I'll put it on the website.

David: What website are you talking about? The Center's website?

Susan: Mine.

David: Oh, your website. Okay. Well thank you, Susan for answering everyone's questions today and for everyone else for attending. The next Ask Me Anything about Employment session is coming soon, and you should receive an announcement by email in the coming weeks. In the next few days, you will also receive a survey about your experience. We'd love to get your feedback about this event. Thank you again, and we look forward to having you join us in the future.

Susan: Thanks so much, David, and thanks very much for all the great questions.

David: Thank you. Bye now.

Susan: Bye.